

REMARKS

1. STATUS OF THE CLAIMS

Claims 123-166 are pending in the application.

Claims 144-150 have been previously withdrawn from consideration as being directed to non-elected species.

Claim 153 has been amended to correct a typographical error by changing “heparin sulfate” to “heparan sulfate.” Applicant’s amendment does not introduce new matter.

2. RESTRICTION

The Examiner found that “Claim(s) **123-143** are subject to restriction and/or election requirement.”¹ This finding is confusing because in a different part of the office Action, the Examiner required election of species recited in different claims, *i.e.*, claims **151-155** (Group A), and claims **136 and 157-162** (Group B).² In yet another part of the Office action, the Examiner referred to claims **29 and 32**.³ Another confusing aspect of the instant Office action is the Examiner’s reference to **groups A and B** in one part of the Office Action,⁴ while also referring to **Groups III-VIII** in a different part of the Office Action.⁵

Nonetheless, to expedite prosecution, Applicants believe, but are not certain because of the above discussed ambiguity, that the Examiner intended to restrict Claims 135-162 into two groups, A and B, as follows.

A. Group A: Directed to “various species of compounds to which the antibody does not bind recited in claims 151-155,” as follows:

- glucuronic acid (Claim 151),
- galacturonic acid (Claim 151),
- sialic acid (Claim 151),
- lactic acid (Claim 151),

¹ (Emphasis added) Office Action, page 1, item 8.

² Office Action, page 2, item 1.

³ Office Action, page 3, item 2.

⁴ Office Action, page 2, item 1.

⁵ Office Action, page 3, item 2.

- pyruvic acid (Claim 151),
- uronic acid (Claim 151),
- the sulfated glycan thyroglobulin (Claim 152),
- the sulfated glycan neural cell adhesion molecule (Claim 152),
- the glycosaminoglycan chondrosamine (Claim 153),
- the glycosaminoglycan chondroitin sulfate (Claim 153),
- the glycosaminoglycan chondroitin sulfate tetramer (Claim 153),
- the glycosaminoglycan chondroitin sulfate octamer (Claim 153),
- the glycosaminoglycan hyaluronic acid tetramer (Claim 153),
- the glycosaminoglycan hyaluronic acid octamer (Claim 153),
- the glycosaminoglycan heparin (Claim 153),
- the glycosaminoglycan heparan sulfate (Claim 153),
- the phosphorylated sugar glucose-1-phosphate (Claim 154),
- the phosphorylated sugar glucose-6-phosphate (Claim 154),
- the phosphorylated sugar mannose-6-phosphate (Claim 154),
- the phosphorylated sugar galactose-6-phosphate (Claim 154),
- the sulfated sugar glucose-6-sulfate (Claim 155), and
- the sulfated sugar galactose-6-sulfate (Claim 155).

B. Group B: Directed to different “steps (d) recited in claims 136 and 157-162,” as follows:

- “identifying said test agent as reducing inflammation in a tissue comprising endothelial cells that express said carboxylated glycan,” (Claim 136),
- “identifying said test agent as reducing adherence of leukocyte cells to endothelial cells that express said carboxylated glycan,” (Claim 157),
- “identifying said test agent as reducing transmigration of leukocyte cells in endothelial tissue that comprises endothelial cells expressing said carboxylated glycan,” (Claim 158),

- “identifying said test agent as reducing extravasation of leukocytes cells in endothelial tissue that comprises endothelial cells expressing said carboxylated glycan,” (Claim 159),
- “identifying said test agent as reducing growth of cancer cells that express said carboxylated glycan,” (Claims 160 and 161), and
- “identifying said test agent as reducing growth of neuron cells that express said carboxylated glycans,” (Claim 162).

The Examiner stated that “Claim 135 is generic for the species of species groups A and B.”⁶

3. **ELECTION**

Applicants elect, **with traverse**, Group A species “heparan sulfate.” Claims 135-143 and 151, 154-162 are readable on the elected species, with Claim 135 being generic.

Applicants also elect, **with traverse**, Group B step (d) “identifying said test agent as reducing growth of cancer cells that express said carboxylated glycan.” Claims 135 and 160-161 are readable on the elected species, with Claim 135 being generic.

4. **TRAVERSAL**

Applicants traverse the restriction requirement. PCT rule 13.1 states that “the international application shall relate to one invention only or to a group of inventions so linked as to form a single general inventive concept (“requirement of unity of invention”).” MPEP 1850 further clarifies that “Unity of invention exists only when there is a technical relationship among the claimed inventions involving one or more special technical features . The term “special technical features” is defined as meaning those technical features that define a contribution which each of the inventions considered as a whole, makes over the prior art. The determination is made based on the contents of the claims as interpreted in light of the description and drawings.”

⁶ Office Action, page 3, item 2.

As discussed above, the Examiner's restriction requirement is confusing and does not establish lack of unity of invention. For example, the Examiner said that "**Product-by-process** claims 29 and 32 read on the BAP-oligosaccharide conjugates disclosed by Toomre,"⁷ and that "Toomre demonstrates that the first-claimed **product** lacks a single technical feature which defines it over the prior art."⁸ However, claims 29 and 32 are not related either to Group A or Group B, to which the Examiner appeared to require restriction. Specifically, Groups A and B are **method** claims, not **product** or **product-by-process** claims. Also, the product-by-process claims 29 and 32 referred to by the Examiner do not include either Group A's "various species of compounds to which the antibody does not bind," or Group B's steps (d) recited in claims 136 and 157-162. Said differently, the Examiner's arguments appear to have been cut-and-pasted from another Office Action and are irrelevant to the pending claims.

The Examiner is also respectfully reminded that "Unity of invention has to be considered in the first place **only** in relation to the **independent** claims in an international application and not the dependent claims."⁹ This has not been done because the Examiner's restriction relates to **dependent** claims 151-155 (Group A) and dependent claims 136 and 157-162 (Group B).

Thus, the Examiner has not met his burden of showing that the species are not "so linked as to form a single general inventive concept." Accordingly, Applicants request withdrawal of the restriction requirement in its entirety.

5. **REJOINDER**

Upon allowance of a generic claim in previously elected Group I (Claims 123-143),¹⁰ and currently elected species of Group A and Group B, Applicants respectfully request rejoinder of (a) claims to additional species, including, but not limited to, previously withdrawn Claims 144-

⁷ Office Action, page 3, item 2.

⁸ *Id.*


⁹ (Emphasis added) MPEP 1850.

¹⁰ Group I consisted of original Claims 1, 6, 9, 29 and 32 per the Examiner's Office communication mailed 3/15/2007. In the "Amendment and Response" mailed on 6/15/07, Applicants elected Group I by re-writing the elected claims as Claims 123-150.

150, and (b) Claims 33-35 (Group III), when written in dependent form or that otherwise include all the limitations of an allowed generic claim, as provided by 37 CFR § 1.141.

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